

## **Scientific Analysis**

### Effectiveness of the Advanced Reading Course

In July 1997 a systematic study was conducted within the Education Department of the University of Newcastle-upon-Tyne to evaluate the Advanced Reading Course. Each of 30 adult readers (from age 14 years upwards) attended one of four 12-hour training courses conducted in normal commercial settings by trainers from the Improved Reading Centre. The researchers compared the reading performances of the participants at the beginning and end of their courses. All the participants were invited for further testing after nine months, and all were invited to complete a questionnaire. 15 questionnaire replies were received; and 10 of the original participants attended the later testing session.

### Strategy Selection

Although speed does play an important role in developing the skills of effective reading, the objective of the course is to develop the participants' ability to select a reading strategy appropriate to the reading material - a strategy which will vary with the required level of comprehension, prior knowledge of the subject, complexity of ideas and writing style, and so on. Thus, in the study, reading performance was measured not only in terms of speed and comprehension but also by a measure which combined these two, known as Effective Reading Performance (E.R.P.).

### Measuring Effectiveness

Throughout the course the E.R.P. of each participant was measured for eight reading passages of varying levels of readability. The order of presentation of the passages was varied for three of the four courses. Subsequent statistical analysis showed that the order of presentation did not contribute to any change in reading performance.

On all three measures, all the participants made significant gains in reading performance over the duration of the course. Average reading speed for the group increased by 218%, from an initial average speed of 253 words per minute to a final average speed of 710 words per minute. Comprehension scores on the same test material improved from an average of 62% to an average of 71%. The average E.R.P. increased from 156 to 560 - an increase of 358%.

### Retained Skills

Ten of the original participants were re-tested in April 1998 (using unfamiliar but equivalent material to the original testing). This group's average reading speed had increased slightly since the course from 658 words per minute to 687 words per

minute, with average comprehension scores of 68% and 66% respectively. The average E.R.P. was 414 compared to 530 at the end of the course - an increase of 249% over the baseline E.R.P. of 166 at the beginning of the course. Thus, the gains in reading performance had been retained over the nine months since completing the course.

## Benefits

All of those who responded to the questionnaire reported that they had benefited from the course. 50% reported better comprehension and appreciation, and 60% reported less effort and reduced fatigue when reading. The most frequently reported benefits were greater motivation and greater confidence in dealing with texts, and 93% reported an improved ability to discriminate quickly between essential and non-essential material.

## The Improvement Process

The course brought about highly significant improvements in reading speed without loss of comprehension - and these improvements were retained over time. How can these improvements be explained?

Reading is a process of 'uncertainty reduction' in which the reader is making continuous decisions about the meaning of the text; and these decisions feed through into the perceptual system. There is evidence to suggest that the improvements in performance are at least in part due to more efficient eye movements - which is compatible with the reports of reduced fatigue when reading - but more research is needed to fully explain the improvements, particularly into the higher order processes like motivation and decision making which are considered to be important contributors.

Reference: Gresswell. B (1998). An Evaluation of the Advanced Reading Course. Unpublished dissertation for the Master of Science degree in Educational Psychology, University of Newcastle-upon-Tyne, United Kingdom.